



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,818	02/18/2004	Floyd Backes	160-048	1488
34845 McGLIINNESS	7590 04/09/2007 S & MANARAS LLP	EXAMINER		
125 NAGOG I	PARK		TRINH, TAN H	TAN H
ACTON, MA	01720		ART UNIT PAPER NUMBER	
			2618	
SHORTENED STATUTO	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MC	ONTHS	04/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
	10/780,818	BACKES ET AL.
Office Action Summary	Examiner	Art Unit
	TAN TRINH	2618
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING Description of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 136(a). In no event, however, may a I will apply and will expire SIX (6) MOI te. cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133)
Status		
1) Responsive to communication(s) filed on 18 F	-ehruan/ 2004	
_	s action is non-final.	
3) Since this application is in condition for allowa		ters prosecution as to the merits is
closed in accordance with the practice under		· ·
Disposition of Claims		
4)⊠ Claim(s) <u>1-3</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdra		
5)⊠ Claim(s) <u>3</u> is/are allowed.	iwii iioiii consideration.	•
6)⊠ Claim(s) <u>1</u> is/are rejected.		
7)⊠ Claim(s) <u>2</u> is/are objected to.		
8) Claim(s) are subject to restriction and/o	or election requirement	
,	or election requirement.	
Application Papers		
9) The specification is objected to by the Examination		
10)⊠ The drawing(s) filed on 18 February 2004 is/ar		
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct		
11) The oath or declaration is objected to by the E	xaminer. Note the attache	d Office Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign	·	•
a) ☐ All b) ☐ Some * c) ☐ None of:	in priority under 35 0.3.C.	
1.☐ Certified copies of the priority documen	•	
2. Certified copies of the priority documen		unnlication No
3. Copies of the certified copies of the price		
application from the International Burea		received in this realional Stage
* See the attached detailed Office action for a list		received
	•	
Attachment(s)		
) X Notice of References Cited (PTO-892)	A) [] Intentions	Summary (PTO-413)
?) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(	s)/Mail Date
B) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of I	nformal Patent Application
Paper No(s)/Mail Date	6)  Other:	<u>_</u> .

### **DETAILED ACTION**

### Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 05-27-2005, 04-28-2005, 10-28-2004, 10-25-2004 and 06-15-2004, the information disclosure statement has been considered by the examiner.

## **Double Patenting**

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 10/781, 536.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-5 of the copending application teach all limitations in claim 1.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/781, 219.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-5 of the copending application teach all limitations in claims 1.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4-5 of copending Application No. 10/781, 535.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 4-5 of the copending application teach all limitations in claim 1.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shpak (U.S. Patent No. 6,907,229).

Regarding claim 1, Shpak teaches a wireless network (see fig. 1) comprising: a plurality of access points (see fig. 1, access points (AP) 22-23, 25 and 27), the access points cooperative to automatically choose channels for operation so that each access point uses a different channel (see col. 6, lines 28-38), the access points being further cooperative to share channels in a manner that minimizes interference if no free channels remain (see col. 6, lines 1-7 and lines 19-27); wherein access points sharing channels decrease their transmit power to minimize same channel interference (see col. 8, lines 64 - col. 9, lines 28); wherein access points transmit messages including a Backoff value to other access points (see col. 8, lines 64 - col. 9, lines 28). In this case the access point 22 is transmitted the Backoff value to other access point using the nominal level and below interference threshold level. The Backoff value indicating to the other access points how far the transmitting access point's power has been adjusted down (see col. 8. lines 64 - col. 9, lines 28). Shpak teaches the Backoff value indicating to the other access points how far to adjusted down, that is adjusted to below an agreed threshold. wherein the access points that received the messages use the Backoff value to determine their own Backoff values (see fig. 2, and col. 9, lines 12 - col. 10, line 29, and also see col. 4, lines 40 - col. 5, lines 18). In This case, since the access point 27 received the transmitted message from access point 22 and the transmit downlink signal with simultaneously with access 27 on the their own signals are keep below an agreed threshold (Backoff values). That is obvious to the the Backoff value indicating to the other access points how far the transmitting access point's power has been adjusted down.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify a above teaching of Shpak, in order to provide the power control on a plurality of access points and not to interfere with the transmissions of the first access point (See suggested by Shpak on col. 3, lines 24-26).

## Allowable Subject Matter

- 6. Claim 3 is allowed.
- 7. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Reasons for allowance

8. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 3 and dependent claim 2, Shpak teaches a wireless network (see fig. 1) comprising: a plurality of access points (see fig. 1, access points (AP) 22-23, 25 and 27), the access points cooperative to automatically choose channels for operation so that each access point uses a different channel (see col. 6, lines 28-38), the access points being further cooperative to share channels in a manner that minimizes interference if no free channels remain (see col. 6, lines 1-7 and lines 19-27); wherein access points sharing channels decrease their transmit power to minimize same channel interference (see col. 8, lines 64 - col. 9, lines 28). However, Shpak alone or in combination with other prior art of record, fail to disclose; a plurality of stations associated across the access points, each station associated with one access point on one channel; wherein the stations receive messages from access points including the

Backoff value; wherein the stations turn down their transmit power in response to the Backoff value received in the messages; wherein stations canvass other channels to see if another channel includes an access point that would provide better network performance; wherein better network performance is provided if an access point on another channel is closer than the access point to which the station is currently associated; if a station finds an access point on another channel that would provide better network performance, the station sends a message to the access point to request association with the access point; wherein access points receive the messages from the stations and selectively allow association of the stations to the access points based on the loading of the access point, as specified in independent claims 2-3.

#### Conclusion

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

Application/Control Number: 10/780,818

Art Unit: 2618

If attempts to reach the examiner by telephone are unsuccessful, the examiners

supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is

assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

11. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh Division 2618 March 31, 2007

PATENT EXAMINER
TRINH,TAN

Page 7